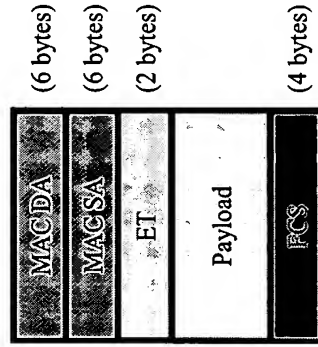




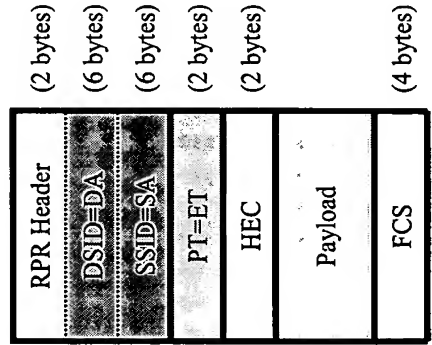
Option #1c: Example

Locally Originated and Terminated Packet Flow

Router/Host/Server Client Data Frame

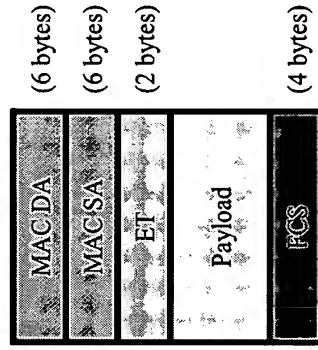


Resulting RPR Frame

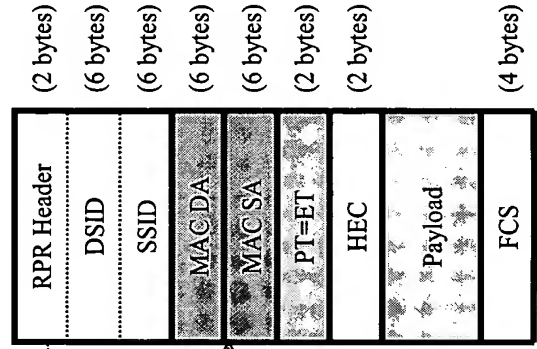


Packet Flow Involving Bridges

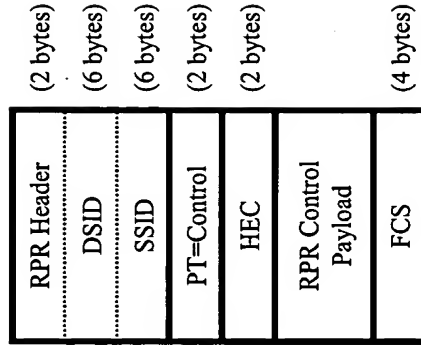
Bridge Client Data Frame



Resulting RPR Frame



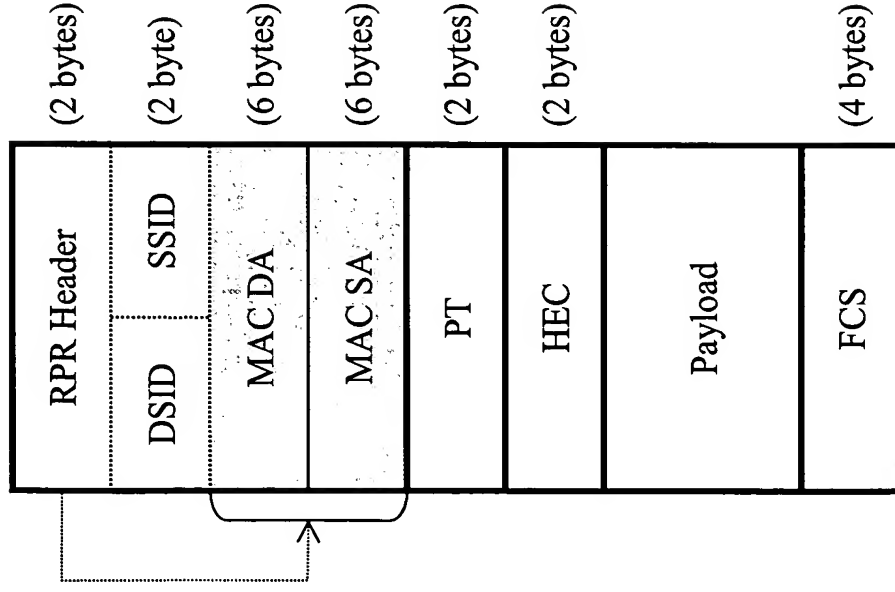
RPR Control Packet



Values of DSID/SSID

- May, but need not, be derived from MAC DA/SA (e.g., using SID DB)
- Must be a member of the Ring Topology Image

Frame Structure with Station Identifiers: Option #1d



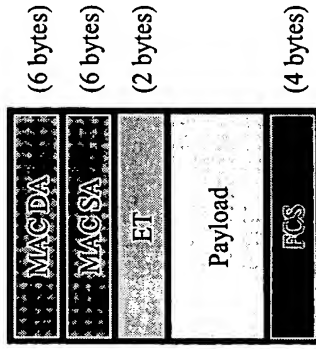
- Bit in RPR Header indicates presence of Remote MAC addresses in frame format
- Frame syntax changed when Remote MACs are present
- MAC reception rules changed to accommodate DSID and SSID (labels)



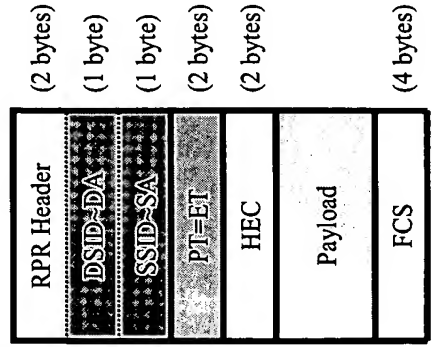
Option #1d: Example

Locally Originated and
Terminated Packet Flow

Router/Host/Server
Client Data Frame

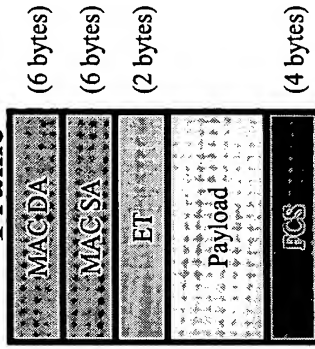


Resulting RPR Frame

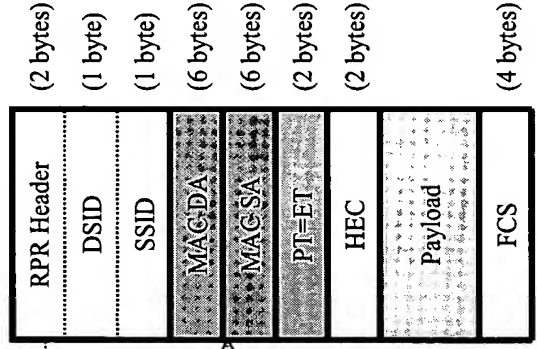


Packet Flow Involving
Bridges

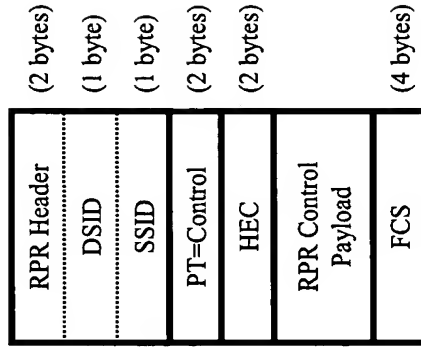
Bridge Client Data
Frame



Resulting RPR Frame



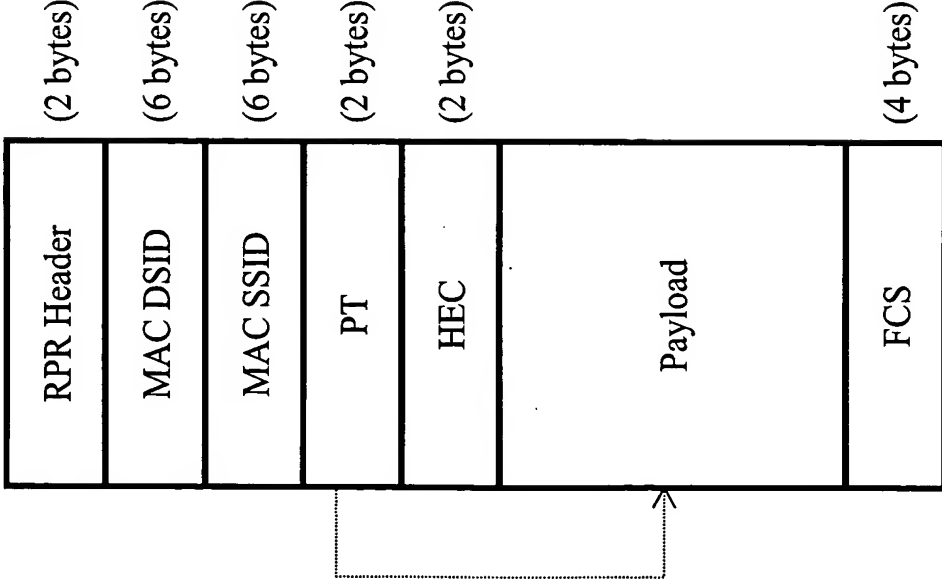
RPR Control Packet



Values of DSID/SSID

- May, but need not, be derived from MAC DA/SA (e.g., using SID DB)
- Must be a member of the Ring Topology Image

Frame Structure with Station Identifiers: Option #2a

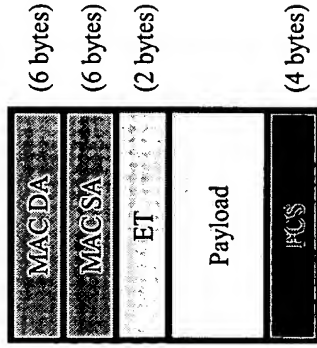


- Frame syntax unchanged
- Frame semantics changed ?
- MAC SA and DA (prior to HEC) *always* in the Ring local address domain
 - All fields prior to HEC are specific to managing packet flow on the RPR LAN
- Packets with Remote MAC address are carried in the RPR frame Payload
 - PT field indicates RPR addressing hierarchy
- Local traffic (with local MAC addressing) use the Payload to carry Client data.

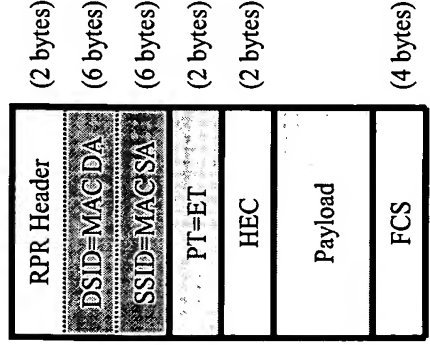
Option #2a: Example

Locally Originated and Terminated Packet Flow

Router/Host/Server Client Data Frame

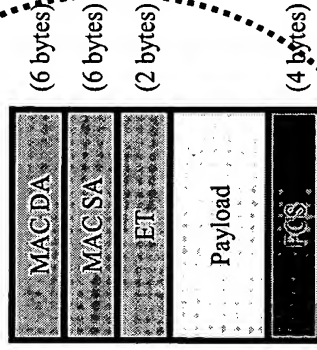


Resulting RPR Frame

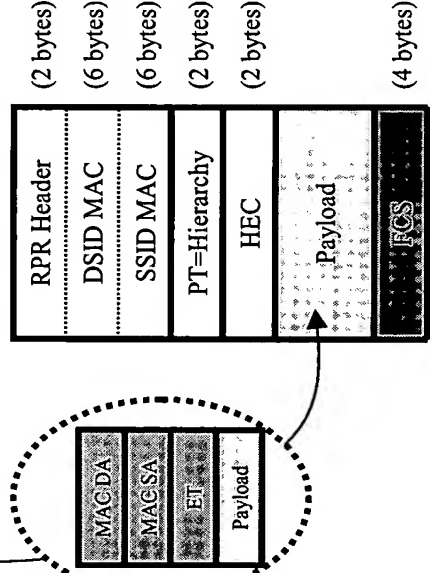


Packet Flow Involving Bridges

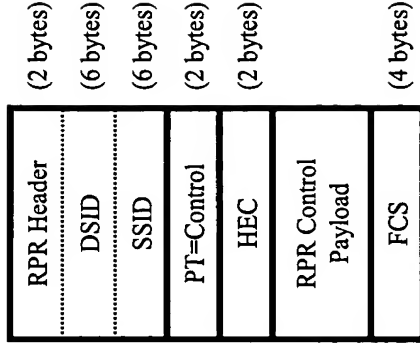
Bridge Client Data Frame



Resulting RPR Frame



RPR Control Packet



Values of DSID/SSID

- May, but need not, be derived from MAC DA/SA (e.g., using SID DB)
- Must be a member of the Ring Topology Image



Open Issues



- Certain members of BAH believe that this option results in a different format for local addresses versus remote addresses

Option Comparison



Category	Option #2a	Option #1a	Option #1b	Option #1c	Option #1d
No change to frame format					
No impact to existing MAC reception rules					
Avoids introduction of distribution and uniqueness algorithm need to manage Station label identifiers.					
Can support Bridging with Flooding proposals.					
Can support Bridging with Spatial Re-Use proposals.					
Can support multiple flooding techniques (e.g., source stripping, TTL scoping, etc.)					
No impact to currently defined Service interface between 802.17 MAC and MAC Clients.					
Maximum Frame Tax (Ring Configuration dependent – Ring has at least 1 Bridge operating with Spatial Reuse)					
Minimum Frame Tax (Ring Configuration dependent – Ring does not have any Bridges resident, or has at least 1 Bridge but does not operate a Broadcast media)					



Option Comparison



Category	Option #2a	Option #1a	Option #1b	Option #1c	
				Label SID	MAC SID
Fixed pre-HEC fields					
Bridge support for source stripping					
Same frame format for Bridge and non-Bridge devices					
Is Format in the domain of 802.17?					